

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2001-126469

(43)Date of publication of application : 11.05.2001

(51)Int.CI.

G11C 11/22
H01L 27/105
// H03K 3/356

(21)Application number : 2000-156902

(71)Applicant : RAMTRON INTERNATL CORP

(22)Date of filing : 26.05.2000

(72)Inventor : ELIASON JARROD
KRAUS WILLIAM F

(30)Priority

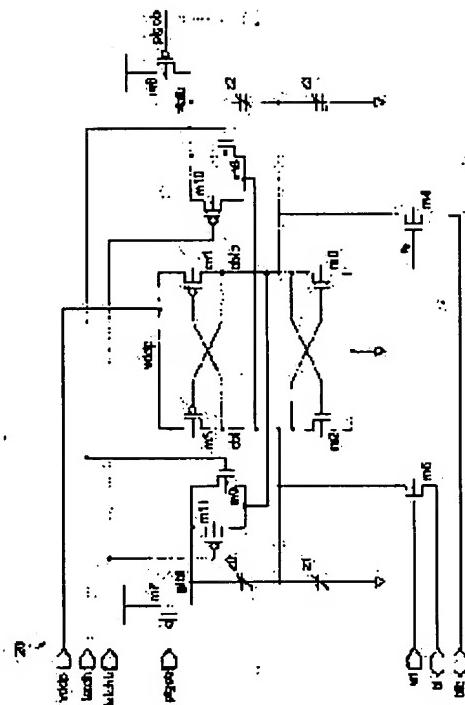
Priority number : 1999 351563 Priority date : 12.07.1999 Priority country : US

(54) FERROELECTRIC NON-VOLATILE LATCH

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a non-volatile ferroelectric latch whose performance is improved.

SOLUTION: A non-volatile ferroelectric latch 20 is provided with sense amplifiers m0, m1, m2, and m3 having at least one input/output connected with a bit line node cb1, a ferroelectric storage capacitor z0 connected between a plate line node plbl and a bit line node cb1, and a load element z1 connected with the bit line node cb1. This sensor amplifier includes a second input/output connected with a second bit line node cblb. The latch circuit 20 is provided with a second ferroelectric storage capacitor z2 connected between the second plate line node plblb and the second bit line node cblb and a second load element z3 connected with the second bit line node cblb. The load element includes a dynamic switching ferroelectric capacitor, a static non-switching ferroelectric capacitor, a linear capacitor, and a resistance load.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]